

IN THE CLAIMS:

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1. (original) For use in a cable television converter terminal, a passthrough circuit for passing a tuned signal from a tuner to a radio frequency modulator for output to external equipment, the passthrough circuit arrangement comprising:  
a first signal path, arranged to receive the tuned signal from the tuner and to provide a NICAM signal component of the tuned signal to the radio frequency modulator; and  
a second signal path, arranged to receive the tuned signal from the tuner and to provide at least one other signal component of the tuned signal to the radio frequency modulator.
  2. (original) A passthrough circuit, as claimed in claim 1, wherein the first signal path comprises a NICAM surface acoustic wave filter, coupled to receive the tuned signal from the tuner and configured and arranged to pass a NICAM signal component of the tuned signal and to substantially reject non-NICAM signal components of the tuned signal.
  - B<sup>1</sup> 3. (original) A passthrough circuit, as claimed in claim 2, wherein the NICAM surface acoustic wave filter outputs a signal to a mixer which is set at a selected frequency using a crystal oscillator.
  4. (original) A passthrough circuit, as claimed in claim 1, wherein said first signal path comprises an alignment-free filter coupled to receive the tuned signal from the tuner and configured and arranged to pass a NICAM signal component of the tuned signal and to substantially reject non-NICAM signal components of the tuned signal.
  5. (original) A passthrough circuit, as claimed in claim 2, wherein the first signal path further comprises a mixer, coupled to receive the NICAM signal component passed by the NICAM surface acoustic wave filter, and configured to downconvert the NICAM signal component to a baseband NICAM IF frequency.

6. (original) A passthrough circuit as claimed in claim 5, wherein the NICAM IF frequency is one of 6.552 MHz and 5.85 MHz.
7. (original) A passthrough circuit as claimed in claim 5, wherein the first signal path further comprises a low pass filter, coupled to receive the downconverted NICAM signal component from the mixer and configured and arranged to attenuate mixer harmonics from the downconverted NICAM signal and to provide a NICAM output signal to the radio frequency modulator.
8. (allowed) For use in a cable television converter terminal, a passthrough circuit for passing a tuned signal from a tuner to a radio frequency modulator for output to external equipment, the passthrough circuit arrangement comprising:
- a first signal path, arranged to receive the tuned signal from the tuner and to provide a NICAM signal component of the tuned signal to the radio frequency modulator; and
  - a second signal path, arranged to receive the tuned signal from the tuner and to provide at least one other signal component of the tuned signal to the radio frequency modulator;
- wherein the second signal path comprises:
- a channel surface acoustic wave filter, arranged to receive the tuned signal from the tuner and to filter the tuned signal to generate a filtered signal;
  - an intermediate frequency strip, configured and arranged to amplify the filtered signal;
  - a dual surface acoustic wave filter, configured and arranged to separate the amplified filtered signal into audio and video signal components;
  - an audio and video amplifier, operatively coupled to the dual surface acoustic wave filter and configured and arranged to amplify the audio and video signal components; and
  - an audio/video demodulator, configured and arranged to downconvert the amplified audio and video signal components to their respective baseband frequencies and to provide the downconverted audio and video signal components to the radio frequency modulator.

9. (allowed) A passthrough circuit as claimed in claim 8, wherein the second signal path further comprises an operational amplifier arrangement, coupled between the dual surface acoustic wave filter and the audio and video amplifier, configured and arranged to further amplify the amplified filtered signal.
10. (original) A passthrough circuit as claimed in claim 1, wherein the first signal path is constructed as a unitary circuit module.
11. (original) For use in a cable television converter terminal, a passthrough circuit for passing a tuned signal from a tuner to a radio frequency modulator for output to external equipment, the passthrough circuit arrangement comprising:
- a NICAM surface acoustic wave filter, coupled to receive the tuned signal from the tuner and configured and arranged to pass a NICAM signal component of the tuned signal and to substantially reject non-NICAM signal components of the tuned signal;
  - a mixer, coupled to receive the NICAM signal component passed by the NICAM surface acoustic wave filter, and configured to downconvert the NICAM signal component to a baseband NICAM IF frequency; and
  - a low pass filter, coupled to receive the downconverted NICAM signal component from the mixer and configured and arranged to attenuate mixer harmonics from the downconverted NICAM signal and to provide a NICAM output signal to the radio frequency modulator.
12. (original) A passthrough circuit as claimed in claim 11, wherein the mixer is set at a selected frequency using a crystal oscillator.
13. (original) A passthrough circuit as claimed in claim 12, wherein the selected frequency is one of 45.75 MHz and 38.9 MHz.

14. (original) A passthrough circuit as claimed in claim 11, wherein the baseband NICAM IF frequency is one of 6.552 MHz and 5.85 MHz.

15. (original) A passthrough circuit as claimed in claim 11, wherein the NICAM surface acoustic wave filter, mixer, and low pass filter are constructed as a unitary circuit module.

16 - 17. (cancelled)

18. (previously added) A method of processing a television signal comprising filtering an output of a tuner with a surface acoustic wave filter to separate a NICAM audio signal from said output of said tuner.

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cont.  
19. (previously added) The method of claim 18, further comprising:  
processing said NICAM audio signal; and  
inputting said NICAM audio signal to a modulator.

20. (previously added) The method of claim 19, further comprising modulating said NICAM audio signal and a video signal of said television signal to produce a radio frequency signal.

21. (previously added) The method of claim 20, further comprising outputting said radio frequency signal to a television set.

22. (previously added) The method of claim 19, wherein processing said NICAM audio signal comprises:  
mixing said NICAM audio signal with an oscillating signal; and  
filtering said NICAM audio signal.

23. (previously added) A system for processing a television signal comprising:  
means for tuning a selected channel signal from an incoming television signal; and  
means for filtering said channel signal with a surface acoustic wave filter to separate a  
NICAM audio signal from said channel signal.
24. (previously added) The system of claim 23, further comprising:  
means for processing said NICAM audio signal; and  
means for modulating said NICAM audio signal with a video signal of said channel  
signal to produce a radio frequency signal.
25. (previously added) The system of claim 24, further comprising means for outputting  
said radio frequency signal to a television set.
26. (previously added) The system of claim 24, wherein said means for processing said  
NICAM audio signal comprise:  
means for mixing said NICAM audio signal with an oscillating signal; and  
means for low-pass filtering said NICAM audio signal.
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